Thailand

THE NATIONAL ECONOMIC DEVELOPMENT PROGRAMME

B.E. 2504 - 2506 - 2509

[1961-1966]

INTERNATIONAL INSTITUTE
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Economic Development Targets

The government, during the course of its economic development program covering the periods B.E. 2504 - 2506 and 2507 - 2509 starting from B.E. 2504 - 2506 - 2509, will endeavour to attain the following goals, namely:-

1) The rate of growth of Gross National Product which now stands at 4% per annum will be increased to 5% and the rate of increase of per capita income which is now running at 2% per year, will be raised to the level of 3% at the least.

2) The present average rate of capital formation which is now estimated to be in the neighborhood of 14 - 15% of the Gross National Product shall be maintained at a level of not less than 15% per annum.

3) Agricultural production will be increased by about 3% per annum the production of important crops is to attain following targets:-

1) Rice Production is to be increased at the annual rate of 1.3%

2) Rubber Production in the first three-year period (B.E. 2504 - 06) is to be increased by at least 6%, from B.E. 2502 level.

3) Maize Production is to be gradually increased to double the B.E. 2502 output by B.E. 2506.

4) The production of teak, between the period from B.E. 2504 to B.E. 2506 may be reduced by about 5% per year, and must be compensated by increased production of timber of other varieties. At the same time there is to be a reforestation and conservation of the existing teak forest.

5) Efforts will be made to increase cassava production, the target being an increase of 15% by B.E. 2506 from B.E. 2502 level.

6) During the first three-year period (B.E. 2504 - B.E. 2506) adequate attention will be given to stepping up the production of stick lac, through introduction of improved techniques.

7) In the field of livestock, it is planned to increase production at the minimum rate of 3% per year. As regards fishing, the target is a 50% increase in total catch by B.E. 2506 from B.E. 2502 level.

8) To undertake a forest conservation and reforestation program,

/ aimed....

aimed at attaining forest reserve area equal to 50% of the total land area of the Kingdom.

4) The rate of increase of national income contributed by the industrial sector which now stands at 10% per year will be raised to the level of 12% by B.E. 2506.

Attempts shall also be vigorously made to raise the production of some important industries, and it is planned that, by B.E. 2506, the following industries will expand their output in terms of percentage based upon B.E. 2502 figure as hereunder given:-

Cement industry		50%
Textile	"	100%
Sugar	"	8%
Paper	"	400%
Gunny-Bag	"	50%
Tobacco	"	50%
Tin	"	40%
Lignite	"	300%
Gypsum	"	300%

5) The construction of Yan-Hee Hydroelectric Dam will be completed in B.E. 2506. This dam, in its initial stage, is expected to generate electric power of 140,000 kilowatts. However, the modernization of Power Distribution System in the metropolitan areas of Bangkok and Dhonburi as well as in some provinces must be completed prior to the completion of the dam.

By the end of B.E. 2506, there will be a total power supply of 370,000 kilowatts as against 138,000 kilowatts currently available for the whole country.

6) The Government shall undertake to improve the existing highways and waterways. Government enterprises in the field of transportation and communication will be made self-supporting where possible in order to relieve the financial burden.

Between B.E. 2504 - 2506 it is planned to add 1,000 kilometers of highway, to make up for deficiencies in the existing trunk roads, 295 kilometers out of this represents a new stretch running from Chumporn to Nakornsrithammarat.

/Simultaneously....

Simultaneously, efforts will be made to improve substandard highways over a total length of 1,000 kilometers.

A new railways terminal will be constructed at Bang Sue. A new track of 272 kilometer will be laid to connect Kang-Koy with Bua-Yai. In addition, the program includes an improvement of railway equipment, a replacement of rails for the southern route, and the completion of unfinished railway bridges.

Overall improvement program for postal, telegraphic, telephone, and radio services shall be undertaken along with a telecommunication construction program, and after the completion of the latter, the Government may consider placing the above-mentioned related services under the responsibility of a public enterprise, or of an independent incorporated concern.

7) The Government plans to expand, in accordance with financial feasibility, public health and general education services as far as possible, with special emphasis on vocational education.

8) The Government will endeavour to maintain the country's balance of trade with a view to stabilize the overall economic situation position. Active steps will be taken to provide external market for the increased output of local produce. Due attention will be placed upon appropriate measures to keep the volume of both exports and imports of the country in balance while allowing an annual increase of 4% for both.

9) The Government will endeavour to stabilize the value of baht currency at all times and, if necessary, to revise taxes so as to prevent inflation and to facilitate the economic growth.

From the period beginning B.E. 2504 to B.E.2509, it is estimated that annual public expenditure will increase by 500,000,000 baht, The expenditure on economic development in 2504 will be 19.5% of the total government outlay. It is intended to raise the proportion for economic development to 28.7% by B.E. 2509.

The Government may borrow 3,000,000,000 baht from foreign sources to meet its economic development expenditure during the first three years (B.E. 2504-2506). This amount includes the undisbursed loans of 1,500,000,000 baht, which are to be gradually drawn upon through out the period of six years beginning from

/ B.E. 2504.....

B.E. 2504 - 2509. The Gov't may also receive financial assistance from foreign sources in the field of economic co-operation and technical assistance.

In developing the economy of the nation the state will adhere to the overall economic policy as hereunder outlined:-

1. Agriculture.

1) Increase agricultural productivity through a comprehensive irrigation program. A high priority will be placed on Chao Praya and Yan-Hee dam projects the completion of which should contribute greatly to the attainment of higher agricultural production. In addition to this, the execution of irrigation projects, such as Kang Kra-Jan and other important projects will increase production in other parts of the country.

2) Promote the improvement of production techniques by way of dissiminating the knowledge of agricultural sciences to the farmers through demonstration methods, the primary aim of which is to persuade the Thai farmers to engage in crop diversification, mixed farming, quality improvement, through extensive use of improved rice strains, superior rubber planting materials, and other important cash crops. Further experimental works an fertilizers and the encouragement of their application as well as the control of pests and diseases will be undertaken by the government.

3) Improve and expedite the forest conservation program, aimed at regulating the permanent flow of timber supply for future uses. This includes the maintenance of the existing forests and reforestation particularly in the watershed areas. In order to accomplish these purposes, it is necessary that the existing Forest Conservation Law be amended to suit present conditions. Further, it is planned to extend the forest conservation program to cover 50 per cent of the total area of the country.

4) Improve and maintain existing areas for culture of fish and other edible marine and fresh-water products and to create new productive areas. As well as conducting a constant study, and, research and dissimination of knowledge which will lead to better conservation and increase of aquatic products.

5) Encourage animal husbandry activities as well as extending works on control and eradication of animal diseases.

/ 6) Implement.....

6) Implement community development project in rural areas with a special emphasis upon improvement of agricultural practices. Various methods will be experimented in each region and only these which produce concrete results will be chosen and employed. Priority will be given to the Northeast Region.

7) Conduct a Land Use survey for proper land classification so that future agricultural land be determined and protection of forests facilitated.

8) Improve the existing Self-Help Land Settlements by putting the virgin land within them to proper use and also establish hill-tribe settlements in selected places.

2. Co-operation.

1) To help organize and establish co-operative societies of different types, on the understanding that the co-operative members fully appropriate the fundamental principles of co-operative organization, and that they will be capable of successfully managing the affairs of the societies in due course.

2) To assist co-operative societies to attain their self-sufficiency within due time. The Government's extension service in this field will be mainly concerned with providing technical knowledge and facilitating the operation of the cooperative societies.

On the financial side of the societies, members will be responsible for contributing to their capitalization. In case the government is demanded by the societies to provide them with financial assistance in the form of loan at a low rate of interest, the repayment of such loan must be made within reasonable period of time.

3) The efforts to promote co-operative societies must be done in such a way that they are in harmony with projects directed toward economic development, such as agricultural projects.

4) To experiment, on a limited scale, the establishment of new types of co-operative societies. However, such experimental societies shall not expand until individual members thoroughly understand their methods of operation and are capable of managing the affairs of the societies.

/ 3. Indudtry.....

3. Industry.

1) Promote private investment in different fields of industry, with an emphasis upon industries which, in the main, use local raw materials, and those producing import substitutes. However, such promoted industries must be efficiently run and capable of producting products in great quantities and their quality must equal to those of comparable products of foreign make. In addition, they must prove themselves capable of standing on their own after a reasonable length of time.

2) The state shall not compete with private interests in setting up parallel enterprises, but shall undertake to continue and improve the efficiency of those already established.

3) To promote the exploration and to conduct the surveys on untapped natural resources, in particular, Mining and Geological surveys.

4) To undertake training programs for skilled labor which are needed by industries in the country.

5) To help cottage industries to gain a firm footing in business by way of providing them with up-to-date technical know-how and marketing facilities.

4. Power

1) To implement Yan-Hee Hydro-electric Project to its completion within the scheduled time.

2) To make preparations for future consumption of the power supply from Yan-Hee. These include, for instance, the construction of transmission line and the establishment of electric distribution systems in provinces to be supplied with the power from Yanhee.

3) To carry out the Mekong River Survey project in co-operation with the United Nations.

To produce reasonably cheap power from available sources

4) To transmit electric power from different generating sources to meet the country's demand.

/5. Communication.....

5. Communications.

1) To improve land, water and air transport in such a way as to be capable of rendering efficient services, and to reduce their administrative expenses, thus facilitating the economic development activities. Particular attention will be given to the following:-

a) Railroads: It is deemed necessary to complete the construction of the goods yard in Paholyothin area. In addition to this, efforts will be made to increase the amount of rolling-stock in keeping up with the increase in demand for rail transport, and to revise fare and freight rates.

b) Highways: The plan calls for an immediate improvement and maintenance of the existing highways, in order that they will always remain in proper working order, and the establishment of a number of mobile road construction equipment unit. Additional highways will be built within the limited resources available. However, a high priority will be placed upon the improvement and maintenance of highway routes as follows: Bangkok - Chiengmai, Bangkok - Saraburi, Korat - Nongkai, Bangkok - Chumporn and thence to the Malayan border along the Eastern Coast of the Peninsular, Chumphorn - Phuket, Bangkok - Trad, Korat - Ubol and Bangkok - Aranyaprathet. In addition, adequate attention will be given to the improvement and construction of necessary provincial roads.

c) Water Transport: To undertake the improvement and maintenance of water channels in order to facilitate the inland water traffic. This includes the intensive study of the current in the Chao Praya River, so that appropriate measures may be found to reduce the silting rate at the mouth of the river. Supplementary to this, improvement will be made at the ports of Songkla and Puket.

d) Air Transport: To improve the Domestic Air Transport System with a view to enabling it to render fast and reliable services, the Don Muang International Airport to meet the demand of modern airliners and some provincial airports so that they are suitable for the operation of commercial airlines.

2) To improve communication facilities and telecommunication by acquiring additional equipment and personnel and by rehabilitating existing post offices as well as subdividing the postal areas of the overcrowded regions.

/ The.....

The telecommunication system will be completed as planned in the foreign aid program and telephone service will be expanded with revenue from the Telephone Organization.

3) Efforts will be directed towards making the State owned communication services self-supporting.

6. Public Utilities. (electricity, water supply, drainage, sanitation & others)

1) The rendering of utilities services within any municipal area will be the task of the municipality on other public enterprises; but that outside the municipal areas will be the duty of the provincial governments or the local residents.

2) The operation of public utilities services shall be based upon the principle of "self-supporting" and each municipality is advised to utilize as much of its revenue as possible to meet its public utilities outlay.

3) If financially possible, the Government may make available to the municipalities and other townships grants-in-aid or loans for public utilities purposes.

4) The expansion of communication facilities within any locality shall be planned in relation to the state of other public utilities in that particular area.

7. Improvement of Merchandising System.

1) Establish grading standards and supervising procedure for all commodities, especially those which are important exports.

2) To help stabilize prices of some important crops and products in order to give the producers the necessary incentive to raise to maintain their level of output. However, such assistance shall be given only after due consideration is given to relative efficiency of their production and market demand.

3) To render justice of fair price to both producers and consumers by resorting to co-operative methods whereby both producers and consumers manage the affairs of their owned societies.

4) Promote commercial interest among the Thai people.

5) Maintain as much competition as possible among producers and distributers.

/ 6) Encourage.....

6) Encourage the exports of local products.

8. Currency Stabilization.

1) Economize on public expenditure by directing public spendings in such a way that they are conducive to economic development and are of direct benefits to the people as a whole. Furthermore, the contemplated expenditure shall be related to the revenue resources of the government. In the instance that the government engages in deficit financing through borrowing from the Central Bank, such borrowing, shall in no circumstances, produce inflationary effects in the economy.

2) Find ways and means to do away with tax evasion with a view to increasing the government's tax revenue, which, in turn, will be used to finance the economic development program of the country.

3) Revise tax structure in order that the revenue thus collected shall represent a fair proportion of the expenditure, and that it is equitable. Moreover, the revised tax structure must be related to the Government's policy of expansion of agricultural and industrial output.

4) Supervise and control various financial institutions, and see to it that they legitimately function in the best interest of the business community and public in general. This also includes the revision of the Commercial Bank Act, to strengthen the position of commercial banks.

5) Encourage domestic savings by making propaganda as to methods and remuneration of savings and to save more, attract the savings into the Banking system so that their utilization can be controlled by the state in such a way as to yield fully the economic benefits.

9. Social Welfare.

1) Public Health: raise health standard in remote rural areas by upgrading existing second class health centres to the level of first class centres. This is to make every health centre capable of performing more effectively its functions in the field of disease prevention and treatment.

As regards medical services, it is planned to extend these services to meet the demand of the general public by establishing modernly-equipped

/hospitals

hospitals in density populated areas, and to complete the Chiangmai Medical School Project.

A high priority is given to the control of communicable diseases such as leprosy, yaws, tuberculosis and malaria, which is now being assisted by the United Nations.

2) Social Welfare.

a) Housing Project: There will be more housing projects for the low-income groups. The Government will also encourage private investment in housing, since it can considerably relieve the Government burden in this field.

b) Public Welfare Department: Reasonable care and assistance will be given to the destitute, the low income groups, the unsupported children and old-aged, the disabled and the victims of calamities.

Revenue and Expenditure Estimates for the Six-year Economic Development Program.

The following revenue and expenditure estimates for the future six years are calculated upon the maximum revenue basis, warranted by prevailing conditions, the currency stabilization policy and economy measures which have been, and are to be taken.

(million baht)

A. Revenue Estimates	B.E.2504	2505	2506	2507	2508	2509
1) Revenue from taxes and public enterprises:	6,540	7,100	7,600	8,100	8,530	9,000
2) 5% Increased tax revenue arising out of economic expansion	325	350	380	450	470	500
3) Revenue from the revised revenue code	235	150	120	-	-	-
4) Sub-total(1+2+3)	7,100	7,600	8,100	8,530	9,000	9,500
5) Internal loans	1,100	1,150	1,200	1,270	1,300	1,300
6) Combined internal revenue (4+5)	8,200	8,750	9,300	9,800	10,300	10,800
7) External loans				4,000		
8) Foreign aid				3,000		

/ B.....

B. Expenditure based upon Government Appropriation (million baht)

1) General Funds	1,583	1,594	1,606	1,648	1,679	1,710
2) General Administrative Funds for non-economic development agencies	1,978	2,014	2,060	2,131	2,153	2,176
3) General Administrative Funds for economic-development agencies	3,047	3,242	3,434	3,521	3,668	3,814
4) Economic Development Funds	1,600	1,900	2,200	2,500	2,800	3,100
5) Total budget expenditure	8,200	8,750	9,300	9,800	10,300	10,800
6) Percentage of economic development budget as against total budget funds.	19.5	21.7	23.7	25.5	27.2	28.7

C. Sources of economic development funds (million baht)

	2504	2505	2506	2507	2508	2509
1) National budgetary appropriation 2/	1,387.97	1,900.00	2,200.00	2,500.00	2,800.00	3,100.00
2) External loan estimates	904.30	1,239.50	937.20	415.80	251.50	128.40
3) Foreign Aid estimates	517.56	518.78	503.00	504.60	501.80	500.00
4) Profit from public enterprises	139.20	122.00	78.40	64.60	29.10	25.00
	2,949.03	3,780.28	3,718.60	3,485.00	3,582.10	3,753.40

1/ The 2504 fiscal year includes only nine months (January to September). All expenditures pertaining to this year are to be apportioned proportionally.

2/ includes only 9 months appropriation.

/ D.....

D. (Economic Classification of Government Economic Development Expenditure)

(in million)

Government Agencies B.E.	2504	2505	2506	2507	2508	2509
Economic Development Expenditure	1,387.97	1,900.00	2,200.00	2,500.00	2,800.00	3,100.00
Agricultural Sector	438.12	541.02	572.11	804.67	833.52	822.34
Ministry of Agriculture	374.37	472.00	500.00	642.00	700.00	744.00
1. Agriculture Department	24.02	32.31	38.72	18.48	18.8	19.2
2. Rice Department	17.28	22.60	24.30	30.05	35.13	40.41
3. Fisheries Department	4.17	5.42	5.84	6.71	7.33	7.98
4. Livestock Department	17.1	23.59	24.48	-	-	-
5. Forestry Department	23.10	31.78	34.84	20.32	22.29	24.30
6. Irrigation Department	288.70	343.60	345.70	344.20	346.00	346.00
7. Reserve Funds	-	12.67	26.12	222.24	270.45	306.11
Ministry of Co-operative	22.93	25.36	25.27	52.37	56.68	55.88
1. Commercial Co-operative Dept.	2.80	2.80	2.80	8.20	6.70	8.20
2. Land Co-operative Department	10.18	12.20	13.30	27.30	33.00	30.70
3. Credit Co-operative Dept.	9.95	10.36	9.17	16.87	16.98	16.98
Ministry of Interior	34.40	39.06	43.84	106.30	76.84	82.46
1. Land Department	3.20	3.70	3.20	48.20	14.72	15.02
2. Department of Interior	22.00	25.00	30.00	40.80	44.02	48.34
3. Public Welfare Department						
a. Self-Help Settlement	7.20	8.16	8.14	14.50	15.00	15.50
b. Hill-Tribe Land Settlement	2.00	2.20	2.50	2.80	3.10	3.60
Public Enterprises	6.42	4.60	3.00	4.00	-	-
1. Cold Storage Organization	5.00	3.00	3.00	4.00	-	-
2. Na Bon Rubber Plantation	1.42	1.60	-	-	-	-
Industrial Development Funds	422.05	267.63	205.01	54.26	55.53	59.67
Ministry of Industry	18.13	23.61	21.23	20.93	21.03	24.00
1. Department of Mines	17.13	22.61	21.23	20.93	21.03	21.04
2. Department of Science	-	-	-	-	-	-
3. Department of Industrial Promotion	1.00	1.00	-	-	-	-
4. Department of Industrial Factories	-	-	-	-	-	-
5. Reserve Funds	-	-	-	-	-	2.96

/ National Energy.....

(in million)

Government Agencies B.E.	2504	2505	2506	2507	2508	2509
National Energy Authority	2.60	3.30	4.00	5.00	6.00	7.00
1. Kang Rieng Project	0.50	0.50	0.50	-	-	-
2. Development of Lower Mekong Basin	1.72	1.86	1.76	-	-	-
3. Power Resources Survey in Southern Thailand	0.38	0.35	0.25	-	-	-
4. Primary sources of power survey	-	-	-	3.01	2.56	-
5. Reserve Funds	-	0.59	1.49	1.99	3.44	7.00
Ministry of Interior	64.32	78.92	72.98	28.33	28.50	28.67
1. Department of Municipal and Public Works	64.32	78.92	72.98	28.33	28.50	28.67
Public Enterprises	337.00	161.80	106.80	-	-	-
1. Preserved Food Organization	4.10	2.80	2.80			
2. National Economic Development Corporation	185.0	80.00	65.00			
3. Yanhee Electric Authority	51.40	5.00	-			
4. Provincial Electric Authority	36.00	36.00	6.00			
5. Metropolitan Electric Authority	29.00	38.00	33.00			
6. Bang Jak Oil Refinery	12.50					
7. Pharng Oil Refinery	14.00					
8. Glass Organization	5.00					
Communication Development Funds	318.70	617.62	750.23	812.19	908.53	1,031.65
Ministry of Communication	181.51	472.00	570.00	550.00	670.00	800.00
1. Office of The Under-Secretary	5.10	-	-	-	-	-
2. Transport Department	13.30	78.20	55.44	45.56	40.67	39.43
3. Highways Department	151.00	218.60	240.30	227.60	216.60	213.60
4. Post & Telegraph Department	12.10	13.30	14.10	8.50	9.10	9.80
5. Reserve Fund	-	161.90	260.16	268.54	405.63	537.17
Ministry of Interior	40.00	61.22	62.73	82.46	96.03	104.05
1. Department of Municipal and Public Works maintenance and construction of provincial roads.	40.00	61.22	62.73	82.46	96.03	104.05

/Public Enterprises....

B.E. / Government Agencies	2504	2505	2506	2507	2508	2509
Public Enterprises	97.20	84.40	117.50	179.73	142.50	127.60
1. Port Authority of Thailand	85.70	31.70	26.70	55.73	33.20	24.70
2. State Railway Organization	11.50	52.70	90.80	124.00	109.30	102.90
Social Development Funds	202.10	346.09	447.25	470.85	535.21	599.82
Ministry of Education	101.25	200.00	275.00	300.00	325.00	350.00
National Council of Education	33.75	55.00	67.00	75.00	85.00	100.00
Ministry of Public Health	48.96	70.33	83.67	93.58	125.21	149.82
1. Department of Medical Service	20.7	29.19	35.07	41.58	52.11	58.02
2. Department of Medical Science	0.38	0.50	0.50	2.00	2.00	4.50
3. Department of Health	27.88	40.64	47.50	50.00	71.10	87.30
Ministry of Interior	18.14	20.76	22.18	2.27	-	-
1. Department of Public Welfare	18.14	20.76	22.18	2.27	-	-
Commercial Development Funds	7.00	8.00	2.00	-	-	-
Ministry of Economic Affairs	7.00	8.00	2.00	-	-	-
1. Department of Internal Trade	7.00	8.00	2.00	-	-	-
2. Department of External Trade	-	-	-	-	-	-
3. Department of Commercial Intelligence	-	-	-	-	-	-
Reserve Funds For Various Departments & Ministries	-	119.64	223.40	358.03	467.21	586.52

/ PART II.....

PART II

Outline of development activities in the various sectors

The implementation of economic development program of Thailand is outlined hereunder :

I..Agriculture.

a) An emphasis is put upon the raising of agricultural productivity, resulting in a greater yield per rai and in expansion of animal husbandry and fishing activities. Cost of production is to be lowered by the adoption of improved methods and technique of production.

b) Agricultural promotion activities now undertaken by the Government, if proved successful, will be enlarged to attain a wider coverage; but those of which results are not yet determined will either be suspended or carried on at the existing rate, awaiting working results. Any new projects which are likely to be favorable to the agriculture shall be initiated when it is feasible.

c) Priority will be given to projects which aim at expanding production and conserving natural resources, and to projects which demand immediate implementation due to the exigency of the situation.

d) The economic development activities undertaken will be fully coordinated and attention will be paid to their respective rates of expansion in order that balanced growth is attained.

Major Development activities in agriculture consist of the following:

1) Irrigation.

The Irrigation Development Program in the first three years consists of expediting the present unfinished irrigation works. Particular emphasis will be given to the completion of canalization works of the Chao Phraya Project and construction of the Yanhee Dam in order that the expected irrigation benifits and electricity power are brought into realization as soon as possible. The second three years of the Program envisages the construction of other important irrigation projects, namely: Mae Tang (Cheingmai), Kampangpetch (Nakorn Sawan), Ayudhaya's Western Land Development, Maeklong River (Karnchanaburi), Sao-Thong

(Nakornsrithamrat), Lam Pao and Lam Pra Plerng. In additions, works on field ditches and dikes will be first carried out within the Chao Phraya and other projects in the Central Plain

In B.E. 2503 it is estimated that the total irrigated land area is in the neighbourhood of 9,000,000 rais, and this figure will be raised, after the completion of the six-year Irrigation Development Program, to 12,000,000 rais, representing 20% of the total cultivated land area of the country.

After the completion of all the irrigation projects, the Government will undertake to impose water rates, upon the users of irrigated water. The money thus collected will be used to defray part of the costs of repairing and maintaining irrigation works, which are steadily increasing and which otherwise would all fall on the Central Government budget. The arrangement will enable the Government to set aside additional funds for the extension of irrigation service.

2) Agricultural Research and Extension Work.

The research and extension activities of the Government will be strengthened and extended at farm level to bring about widespread application of modern techniques resulting in higher efficiency and lower costs of production. Work is already in hand on rice, coffee, pepper. maize, kenaf, jute, cotton, other annual crops and fruit. Also on soils, fertilizers, pest and diseases and botanical studies. In the six-year period these activities will be given adequate financial support.

Improvement will be effected by stages. The first requirement is the recruitment of an adequate number of qualified technicians. These technicians will be given approximately two years' probationary training in their respective fields before being confirmed in their appointments. As the number of administrative staff is at present sufficient in both central and rural administration it will not be increased. The second requirement is to draw up working plans that will facilitate operational and advisory work at farm level. To assist the several agricultural agencies in meeting their technical problems an agricultural research institute will be established to conduct basic research and experimentation. The institute will be equipped with modern laboratory facilities and staffed with specialists in the several branches of agricultural science. The effectiveness of this institute will be highly dependent on cooperation between the various

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agencies engaged in agriculture and on the coordination of their programs.

Marketing.

The Ministries of Agriculture, Industry and Economic Affairs will cooperate closely in market research and in establishing, for the principal crops, standards to meet buyers' requirements. Such cooperation already exists for disposal of rice, so all that is required is an extension of present arrangements to cover other important crops.

The desirability of instituting minimum guaranteed prices will be carefully studied. It may be that a price support programme will prove desirable only for locally consumed products. In such case the Government may request Governmental agencies or Government-owned factories to purchase their requirements at reasonable prices. A price support policy for products mainly exported might produce surpluses disposable only at a loss and would therefore be detrimental to the economy as a whole. The institution of production quotas is another possible measure that could be taken towards price stabilization but is so fraught with administrative difficulties as to be improbably effective. In conclusion, the policy with regard to maintenance of prices should be the protection of the producer from the middleman, as the Government already does in the case of rice.

Rubber.

Another important project to be started in 1961 is the rubber improvement scheme. A rubber re-planting law is to be passed. The necessary personnel will be recruited and trained and a detailed plan drawn up for the improvement of rubber cultivation. It is expected that execution of this plan will take about six years.

It is considered probable that increases in agricultural output may be higher than the targets set in the Plan if the planned programs in research, experimentation and extension are fully completed.

3) Fisheries & Livestock.

The major part of work contained in the Fisheries Development Program will mainly concern with fish conservation. Some financial assistance in the form of loans shall also be rendered to fishing-operators as a part of the overall fisheries promotion plan. The successful operations of the proposed development

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measures are likely to result in increased yearly supply of catch sufficient to meet the increasing market demand.

In the field of livestock industry, the responsibility of the Government shall be restricted to livestock breeding and disease control. Such services are now being performed and shall be continuously carried on and gradually extended during the next 6 years. In the light of present circumstances, the livestock industry appears to be a lucrative enterprise, and can be immediately expanded, because there is at the present time a ready market to absorb its increased output. However, little attention has been given to the improvement of traditional methods and technique of raising animals. During the six-year period, more intensive efforts will be made to encourage animal production in order that more is produced to meet domestic demand and for export. A new working plan will be drawn up so that objective may be achieved.

4) Forestry and Land Disbribution.

Of the total land area of 320,000,000 rais, 60,000,000 rais have been now brought under cultivation, the remainder being forest lands. It is estimated that about 20,000,000 people make their living from agricultural land; 13% of the farmers are landless. Approximately 1,000,000 consisting largely of hill tribes, who do not have permanent settlement, resort to shifting cultivation method. Together with, the general cultivation practice of increasing production through expansion of cultivated area and the extensive illegal cutting of timber, the catchment areas and forest resources are being rapidly destroyed. This vulnerable situation, if left unchecked, will, in the long run, produce unfavorable repercussion on the economic aspect of the country. Accordingly, land classification to distinguish land suitable for cultivation and forest land to be reserved throughout the country, and the distribution of land for unsettled farming population, constitute economic measure of first priority.

To achieve the above objectives, the following will be undertaken:-

1. The Lands Department, Forestry Department and other agencies concerned will conduct a land use survey throughout the country, making it possible in the first stage for the government to pass a decree conserving forest land areas of approximately 250,000 square kilometers or 156,000,000 rais as against

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the existing forest area of 187,000,000 rais. The land classification to be effected by this land-use survey is estimated to bring forth within the next six years, an additional area of 30,000,000 rais of cultivable land.

2. If necessitated by future population growth the conserved forest area figure of 156,000,000 rais will be adjusted downward to 125,000,000 or approximately 200,000 square kilometers, consisting of head water forest of about 100,000 square kilometers and forest proper of equal area. In the next six years sufficient budgetary appropriation will be allocated to the Forestry Department to enable it to carry out its work regarding maintenance, protection and reforestation to a satisfactory result. Aside from this, the plan takes into consideration the encouragement of substituting lignite coal for firewood, which can make indirect contribution to forest conservation.

3. To distribute land of 30,000,000 rais to the landless farmers. Another 30,000,000 rais is reserved for future distribution should the need arises.

In brief, land classification and forest conservation are of first priority in the economic development task and should be launched and accomplished within the next six years. However, the Government takes cognizance of the fact that the satisfactory completion of this work depends very much upon a full co-operation between the Ministries of Agriculture and of Interior, both in their central and provincial areas of operation. Moreover the existing Land and Forest Laws are to be amended to suit existing conditions. The amendments include, for instance, the incorporation, into the Forest Law, of heavy penalty clause for those who commit violations, and the insertion of a new clause into the Forest Reserve Law making its enforcement a joint responsibility of the Department of Forestry and the Ministry of Interior with a view to achieving more effective protections against private encroachment. Enactment of necessary laws for the establishment of natural parks and wild life conservation, will be effected. In addition, the opening up of new land along the newly constructed highways will be preceded by a system tic land classification and distribution plan.

The enforcement of new laws and those amended to achieve the prescribed aims will require constant attention of the authorities in charge of those laws.

/II Co-operation.....

II. Co-operation.

The establishment of new co-operative societies in the future should be strictly based upon the principles of "self-supporting" and "mutual co-operation", as followed in other countries.

1. The Ministry of Co-operatives will undertake to institute cooperative in-service training for its officials before they are sent out to do extension works aiming at teaching the cooperative members to understand and properly perform their duties. The more co-operative members are effectively grounded in the general principles of the co-operative management, the less will be the responsibility of the officials in charge of supervision. These extension officers will be persons possessing good technical qualifications as well as aptitude for public service. With such carefully selected staff, the training of co-operative members will, it is hoped, stand a good chance of success. The realized benefits of co-operation will, in turn, arouse public interest in general. After this stage has been reached, the Government may gradually withdraw its support, thus effecting an economy on its financial outlay in the future.

Another important factor which is likely to contribute to the success co-operative movement is the provision of basic education. A large number of members have no education background. Therefore, the establishment of primary schools in areas where co-operative societies are located, will give the members the opportunity to learn how to read and write. Being literate, they can read publications and have better understanding of co-operative science when they are taught. Finally, they may be able to make accounting records and, thus, to evaluate the activities of their own societies.

It is expected that in the course of the next few years, a considerable number of co-operative members will complete the training.

2. There will be a co-ordination of work between departments within the Ministry and between outside departments or ministries. Before the execution of any project, appropriate working procedure will be laid out after a joint consultation between the departments concerned.

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3. As the members make living out of crop production, special emphasis must be placed upon their marketing problem. This involves the setting-up of fair trade practice, distribution of improved seeds and the maintaining of farm prices at reasonable level. Much of Government funds have been expended on expanding the number of co-operative societies but marketing problem yet remains. To meet this problem, the co-operative societies will dispose of their produce through various distribution centres already established by the Government.

Although the nature of trade is complicated requiring a very specialized knowledge, still the Government finds itself unavoidably obligated to put it, to some extent, in the hand of Thai nationals. The success of Government efforts, in this respect, upon mutual co-operation between co-operative societies and other Governmental agencies concerned. Only with these concerted efforts any problem that arises can be effectively worked t. The Government invested large public funds in activities and services that will stimulate production and provide outlet for the increased output. The main beneficiaries of this investment should be the producers not the merchants who are likely to leave advantage over the producers.

4. The existing co-operative societies will improve their production methods and techniques along the following lines:-

a) The co-operative societies situated within irrigated area, must, by mutual co-operation of their members, undertake to provide irrigation ditches to the individual members so that they can reap the full irrigation benefits.

b) As for the selection of rice strains and cash-crop seeds as well as fertilizer application assistance will be requested from the department of the Ministry of Agriculture. This is to make sure that the right and efficient methods of farming leading toward increased productivity are rightly employed.

c) Members of co-operative societies will participate in community development project in their own area.

d) Marketing co-operative associations in existence will work in close co-operation with the Public Warehouse Organization and other governmental agencies dealing with marketing of

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agricultural products. In co-operating with each other, facilities will commomly be used if possible.

III. Industry.

1) Mining, Water Resources and Geophysical Surveys.

Among many industrial projects, mining, water resources and geophysical surveys will be recognized as having high priority and thus encouraged to the full. Confronted with limited financial and technical manpower resources, the surveys to be undertaken will be limited to minerals having potential mining possibilities, such as phosphate, potash, natural salt, bauxite and copper. It is expected that private interests will assist in widening the scope of the exploration and survey after the communication system of the country has been improved and become convenient. As there is shortage of water in many parts of the country, underground water survey will be of great benefit to economic development. At present, an underground water exploration is being undertaken with ICA assistance in the Northeast Region. After the termination of this foreign aid project (B.E.2505) the work will be continued and extended to cover other regions by the Government with its own resources. From the economic development point of view, the Ground Water Exploration serves three-fold purposes namely: 1) it makes possible the geological survey; 2) discovery of sources of underground water and 3) water is available for domestic consumption and irrigation. For these reasons, the ground-water exploration has become a joint project now sponsored by three ministries, namely, the Ministry of Industry (Mines Department), the Ministry of Health and the Ministry of Interior.

The Government is fully aware of the importance and benefits of a country-wide geo-physical survey. The expansion of the project from its present status, however, needs foreign assistance in the form of technical knowledge and equipment.

2) Scientific Analysis and Research.

Scientific analysis and research activities are essential for the control of the standard and quality of industrial products. They, also, open up avenues for industrial utilization of natural resources. For the reasons given above this project is supported so that its objectives are achieved as

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planned. Similar support will be given to the Atomic Energy for Peaceful Purposes Project in order that the operations prescribed in the project are accordingly carried out. At the present time and throughout the period from B.E. 2504 to B.E. 2506 efforts will be concentrated upon the research and training aspects - a preparation in anticipation of intensive use of atomic energy for peaceful purpose in the future.

3) Industrial Promotion.

Industrial Promotion is wide in scope. In Thailand, it assumes particular importance since it is a Government policy to encourage private industrial investment. To facilitate private investment in industrial undertakings, the industrial promotion program has been made a joint responsibility of various Ministries. The Ministry of Industry is charged with the duty of collecting factual data on raw material production and technical information and of making them available to those interested. The Ministry of Agriculture is in charge of promoting agricultural production in terms of quantity as well as quality to meet the increasing demand of the industrial sector. The Ministry of Economic Affairs is to be assigned the task of protecting young industries within the country through temporary imposition of import control, and other appropriate measures. The Ministry of Communications is responsible for providing transport services and facilities. The Ministry of Interior and local government are concerned with provision of basic services such as power, water supply and industrial estates. The Ministry of Finance is required to initiate a tax reform which will be inducive to industrial growth. The Investment Board is to assume the function of rendering assistance and of providing protective measures to some promoted industrial activities. Aside from this, the Government will assist industrial development in other ways, for example, by setting up financial institutions for industrial development (i.e. the Industrial Finance Corporation), Industrial Development Centre and by granting patent right to inventors.

Improved co-ordination between Government agencies concerned will undoubtedly accelerate the pace of industrial development.

Among numerous industrial promotion projects, raw material and industrial surveys will be made in order that available data regarding raw materials and existing industrial activities are available to the Government agencies

engaged in industrial promotion activities and the industrial produces. Before attempting to implement the aforesaid survey projects, detailed plan will be drawn up in order that the work is carried out to the maximum advantage. Furthermore, it is contemplated to establish Product Design Center with foreign technical assistance

Aside from the projects listed above, there still be other necessary measures that the Government will undertake to foster industrial development within the plan period, namely:-

1) Establish an information center to make available to the industrialists, technical and other information. Alternatively, this may be effected by reforming existing agencies in such a way as to enable them to perform this additional taste. Foreign technical assistance may be needed in the setting up of this information service.

2) Establish lending institutions which advance funds for industrial purposes at a reasonably low rate of interest. The Industrial Finance Corporation has already been established, but having only small capital, it is not able to supply adequate funds to meet the demand of the industrial sector. When the corporation succeeds in establishing itself firmly in the business, the government may consider supplying it with more capital for the extension of its lending activities.

3) Provide necessary facilities such as factory sites as well as communication and other basic services.

4) Since the Government's industrial development policy is based upon private enterprise, to avoid competition with private interest, the government pledges itself not to set up parallel enterprises, nor expand the activities of its existing industrial undertakings. Moreover, the Government is willing to have private participation in its own enterprises and to sell some of its undertakings to any private interest.

IV Power.

1) To complete the Yanhee Hydro-electric Project within scheduled time in 1963. The total project cost of ₱ 2,000,000,000 inclusive of loan money from the World Bank has been appropriated and made available to meet the

cost of the construction.

2) To make necessary preparations for the absorption of electric power from the Yanhee Project. These include the construction of distribution system in the supplied provinces, the completion of the Lignite Thermal Power Plant at Rama VI Bridge, and the erection of power transmission line for the Bangkok Metropolitan Electricity Authority and the Provincial Electricity Organization, together with sub-stations, distribution lines, and the installation of transformers, safety equipment and meters. An additional lignite thermal power plant will also be constructed in Krabi.

3) To undertake the survey of fundamental power sources, as one of the long range projects, within financial resources available. This survey includes Mekong River Development, Kang Reang, National Electricity Distribution and Power Sources Survey in Southern Thailand.

4) To enter into the construction phase of the projects listed under No. 3 above, after the survey results are known so that cheap power will be produced to meet the increasing demand at present, the total productive capacity is 138,000 Kilo-watt. By the end of the six-year period, the needed capacity is expected to be 400,000 kws.

V Communications.

1) Highways.

The total length of all national highways combined and currently opened to public use is 8,000 kilometers, 2,000 kilometers out of which are asphalted. It would greatly facilitate economic development if Thailand had a complete network of highway system connecting its various regions together. The Highway Development Program to be implemented, during the period B.E. 2504 - 2509, calls for efforts to rehabilitate the existing highways making them more lasting and to construct new highway routes linking up different sectors of the country. The result of the rehabilitation work is that it will lessen considerably the repair and maintenance costs which are rather heavy at the present time.

Toll charges will be collected on all weather highways. The money thus collected shall be used to finance the future costs of repairing and maintenance of that particular roads, or be spent to upgrade other sub-standard

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highways. The Highways Development Program will result in additional 1,000 kilometers of road mileage, which includes Chumporn-Nakornsrithammarat Highway of which construction cost is to be met by a DLF loan. The construction of the new Bangkok-Saraburi Highway to be financed by the U.S. Aid Program, is expected to be completed in 1963. On Highway Rehabilitation work, it is estimated that various highway routes with a combined length of 1,000 kilometers shall be repaired and maintained. To the extent that it is necessary to convert these substandard roads to a better one, the estimated mileage given above must be proportionately reduced.

2) Railways.

It is estimated that the rate of increase of railroad traffic is 4 per cent per annum. As the present railroad capacity will not be adequate to meet the increased demand, more investment in the form of equipment is necessary. The present problems facing the traffic operate on such as the strengthening of railway bridges, will be taken care of. The construction of a new railway line from Kang-Koi to Bua Yai will be continued as when completed it will provide additional facilities for goods traffic from the Northeast. The expansion of railroad services for the next 7 years requires a total investment of about ฿ 1,509 million to be financed by external loans as well as by budgetary and the Organization's own resources. The revision of railway fares and freight rates in 196[illegible] will enable the Organization to contribute larger funds for its expansion program.

3) Civil Air Transport.

Air transport development projects comprise the improvement of the Don Muang Airport and the improvement of domestic air services. The improvement of the Don Muang Airport is an urgent project. Its single runway strip is inconvenient and unsafe, and, it apron, taxi-way ground equipment and building facilities are inadequate to cope with the present volume of air traffic. To correct these deficiencies it is necessary to convert the single runway into a double type one, and, to enlarge the apron, taxi-way and other structures. To render more conveniences to airlines passengers, the Civil Aviation Building will be extended so that there are separate quarters for incoming, outcoming and transit passengers.

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In addition, there is to be a separate air-field located somewhere in the suburban area of Bangkok, serving the need of local traffic, and thus leaving Don Muang specifically as an international airport. Since there are a lot of preparations to be done, priority will be given to the expansion of the Civil Aviation Building and the construction of a second runway will be initiated in 1962 after more detailed study is made.

In the area of domestic air transport, improvements in aeronautical radio services and air traffic control will be made. However, the improvement of air-fields serving domestic services will be undertaken at the rate of one air-field a year in order that such performance shall not impose undue strain on the annual budget.

4) Habour Organisation of Thailand.

For quite some time the Government has undertaken to improve the Bangkok Habor, with a purpose to render the docking of large ocean-going vessels. The sum thus spent for this purpose is enormous. Though the plan succeeds in enabling the vessels to travel up the river to the harbor, continuous dredging - a very costly operation - is necessary because of high silting rate. In trying to cope with this problem the Government has sought technical assistance from the United Nations, to investigate and recommend appropriate measures that will result in reduced maintenance costs. However, the dredging operation in the meantime will be continued irrespective of cost, for it is more than compensated by the economies obtained on transport costs.

Other equally important projects are improvements of the harbors at Songkla and Puket which will facilitate the expansion of the coastal transportation. These two projects are to be commenced at the beginning of the second three year period.

5) Post, Telegraph, Radio and Telecommunication.

The Improvement of Postal and Telegraphic Services project as envisaged by the government, comprises the extension of postal and telegraphic services in Bangkok and Thonburi as well as in provincial area, the rehabilitation and the construction of new post and telegraph offices plus necessary residential quarters.

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Since the projects will result in improved and efficient post and telegraph services, their implementation will be undertaken within the six year period. As regards the extension of postal and telegraphic services in provincial areas, the plan calls for the establishment of 10 post offices annually as well as six central post offices for the newly divided postal areas in Bangkok and Thonburi during the first three years.

In order that improved and more efficient telephone services are available in the provinces, the provincial telephone services presently in the hand of the Post and Telegraph Department, will be transferred to be under the jurisdiction of the Telephone Organization. Thereafter, a project for the extension of these services is to be drawn up.

The Government realizes that one of its many functions is the responsibility to provide telegraph services, being a partial alternative. Therefore, the projected expansion of telegraph services at this phase will be suspended for a while and in the meantime there will be maintenance and repair work to be performed in order to keep the existing telegraph lines in proper working order.

Included in the communication development program is the construction of the telecommunication system. Its estimated cost of about 17,000,000 dollars, will be financed by $ 10 million from the U.S. Aid Program and $ 7 million loan. The project will be carried out to completion as planned.

Since the development of communication system requires some technical knowledges that are lacking in Thailand, there is a need, therefore, for foreign assistance in the form of expert services, equipment and practical training. The development projects requires large capital outlays. During the six year period, external loans as well as capital aid projects such as highway construction, are necessary. The total financial requirement for the six year period is estimated at ฿ 5 billion. As large funds are involves, the value of these projects will be examined to confirm their economic justification.

VI Internal Affairs.

1) Community Development Program.

The Community Development Program serves fourfold purposes which can be enumerated as follows:

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a) To teach the people how to help themselves, and to orientate them to take initiative in developing their community, for example, the execution of public works for community use. The villagers will be asked to contribute their labor for the construction of these public facilities.

b) To train community leaders, who will be key by personnel in persuading their fellow citizens to co-operate with community development officers and other Government officials.

c) The Government will provide technical and financial assistance as well as necessary materials and equipment in conjunction with voluntary labor contributed by the people in carrying out the community development work.

d) The implementation of the community development project requires co-operation and co-ordination between the provincial technical personnel and community development officers who are working in unison with the community leaders.

The main principle of the Community Development Project is that people must learn to help themselves. They must, by mutual co-operation, try to improve and develop their own community. Local resources must be first brought into use before government contribution proportional to the local labor contribution is made available.

Before launching the project, there must be specific surveys conducted in the would-be operation areas regarding the needs of the community, and the required Government counterpart.

The important types of community development work consist of 1) the sinking of permanent water-wells; 2) the construction of feeder roads and 3) the promotion of improved agricultural and animal raising techniques. On technical matters, the Community Development will be dependent upon existing Government 's technical staffs, in particular, the Agricultural officers who will make advice on improved agricultural technique (utilization of soil and fertilizers, seeds selection etc.). However, limited number of agricultural officers is available, the extension of the community development work will, therefore, be related to the rate of increase of agricultural officers.

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In the Northeast, 133 irrigation tanks have been completed. The Departments of Interior, Land Co-operatives and Agriculture will co-operate in securing farmers' hand to help constructing distribution system so that irrigated water can be brought into individual farms. As a result of more effective irrigation, higher crop production in these areas can be expected.

2) Land Survey and Classification.

The Land Survey Program to be conducted is aimed at making possible the efforts to protect forest reserve, to classify the agricultural land area and other land uses. From the economic point of view, this program is fundamentally important for the future economic development of the country. The result of the land survey so to serve as a basis for the subsequent classification of the total land area into: 1) forest under conservation: 2) agricultural land area and 3) land for other uses.

The work will be carried out as follows:-

1) To make use of the existing rather small scale aerial maps,

2) To conduct necessary land surveys to verify the aerial photographs.

The proposed survey will be first started in areas where it is most needed, namely,

a) Watershed areas.

b) Teak forests in the Northern Region.

c) Forest areas under exploitation in Chantaburi and Rayong.

d) Similar forests in other provinces.

Governmental agencies to be jointly responsible in the execution of the land survey and classification project are Ministries of Interior, Agriculture, Industry and Defence. After the land survey and classification works have been completed, the Forestry Department with the co-operation of the Department of Interior and the Police Department will be responsible for protection forest reserve against private encreachment, unlawful occupation of land and illegal timber exploitation.

3) Allocation of Land to the Landless.

The project is drawn up with the explicit purpose of enabling the landless individuals to hold land for homestead and cultivation purposes. According to the survey recently made by the Department of Lands, not less than 1,000,000

persons are classified as squatters and tenant farmers. To meet this problem the Land Department undertakes to

1) allocate small pieces of land (not larger than 1,000 rais) to the landless,

2) allocate large pieces of land (larger than 1,000 rais) to the landless farmers as well as providing them with roads and underground water-wells.

The distribution of land needs to be operated on a wide basis and if loosely carried out can be detrimented economically. And for this reason, the large scale distribution scheme in any one area will be for the time being postponed until the land survey and land classification in the particular area have been completed.

With respect to the allocation of small pieces of land the task will be commenced immediately, and at the end of the first three-year period, it is estimated that the total land area distributed will be in the neighborhood of 300,000 rais.

4) Land Settlement for Hill Tribes.

This Land Settlement for Hill Tribes project is one of the many important projects which must be duly implemented, in order to stop the shifting cultivation practice which results in forest destruction in the catchment area.

Measures to be taken are as follows:-

1) The hilltribes will be induced to adopt new agricultural technique which will make it unnecessary for them to shift their place of cultivation.

2) Land to be granted for settlement purposes to the hill tribesmen will not be land situated in the vicinity of headwaters, or in the forest of high timber value.

5) The Construction of Water Supply Distribution System.

The Department of Municipality and Public Works has two important projects on its work list, namely, the Extension of Bangkok Water-Supply System, and the Extension of Provincial Water-Supply System. The target of the former is to produce 308,869 cubic meters from its own filter tanks, and 123,890 cubic meters from underground water wells. After the above target has been accomplished,

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futher efforts will be made to install filter tanks No. 8 and No. 9 (the No. 9 filter tank will be ordered in 1961). Their installation will be completed in 1962. The installation of these two additional filter units will increase the daily supply of water by 80,000 cubic meters. This is to keep it in line with the future demand. In addition to the installation of two additional filter units, the 26 kilometers long water supply canal will be dredged so as to increase the water intake into the system.

With respect to the Provincial Water Supply System, the Government will take over the outstanding debts incurred by 57 municipalities in this connection. Besides, there are a number of other water supply projects aimed at providing water supply in the rural areas, for instance, the underground water survey undertaken by the Ministry of Industry, the irrigation tanks project in the Northeast and the water wells project in the Community Development Program.

6) Public Welfare Project.

The economic benefits of public welfare works can hardly be measured in concrete terms. However, existing social conditions demand continuation of social assistance now afforded to the needy by the Government. The works that are now being undertaken within reasonable extent include housing projects for low income group, self-help settlement project. As a measure to reduce administrative expenses, the expansion of self-help settlement project will be confined to extending the works within the existing settlements in which some room is still available for additional settlers. Other social welfare works, will be maintained at the present level and the new projects will be postponed in favor of other more urgent project.

VII Commerce.

In remedying the existing commercial situation, the following measures may prove desirable,

1) Establish a Commercial institute of which the main function is to supervise and see to it that the standards and grades of principal exports are measurable to those established, and, to draw up a list of screened legitimate businessmen eligible for foreign trade engagement through a registration method. This selected group is required to maintain stocks of products which are to be

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exported. To help facilitate the export trade of principal products, the Bank of Thailand shall be at any time ready to offer discount services for foreign bills accepted by commercial banks.

Among various exported crops, the following are to be promoted, namely: maize, cassava products, kenaf, kapok, castor beans, pulses, stic-lac and tobacco. The degree to which Thailand will be able to maintain her position in the world market for the products mentioned above, is, however, dependent upon the success of the commercial institute in control of quality.

2) General commercial activities are to be left in private hands. The Warehouse Organization, nevertheless, is to follow closely the market price movements. If the prices offered to the producers are too low, it should immediately intervene by making purchases for its own stocks. Such competition on the buying side of the market will raise the price and keep buoyant the incentive on the part of the producers. In making purchases the Organization may commission one of its affiliates to buy the goods for its own account. The stocks of goods built up in this way may be in part exported, and, if so, the Organization will be required to comply with regulations on standards and grades similarly required of other businessmen.

3) Whereas the Ministry of Economic Affairs is charged with the duty of maintaining price level of exportable goods, and of locating markets for various products, it, therefore, is expected to make available to the Warehouse Organization and its affiliates revolving funds sufficient to the effective conduct of the business. But the Warehouse Organization and its affiliates must manage their business strictly on a business basis, for instance, they are required to exercise good judgement as to whether the price they pay for a particular commodity is appropriate to its quality. In making purchases to maintain the prices, they are to exercise their sound judgement as to what are the reasonable prices taking into consideration the prevailing world prices, inclusive of transportation costs.

4) The warehouses will be built in provincial areas where the supply of the commodities in trade is adequate. In Bangkok area, new warehouses are not necessary as the existing facilities are sufficient to meet the present need.

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5) The management staff who conduct the business of the Warehouse Organization in a manner to achieve the objectives of the policy must be honest and conscientious. Furthermore, they must be experienced and able to make good business judgement.

6) The export promotion activity which is a joint responsibility of the Ministry of Economic Affairs and the commercial institute is to be assisted also by various departments of other ministries such as:-

1) The Department of Agriculture, which is assigned the function of promoting cultivation in areas specified in the total economic development program (2504 - 2509), will be in a position to make estimates of the annual increase in production, as well as to give statistical reports on the size of stocks kept by individual farmers.

2) The Department of Public Welfare, which is in charge of self-help settlements, may consult the Ministry of Economic Affairs in matters concerning the required standards and qualities of the produce, and may request the latter to provide its marketing outlets.

3) The Department of Land Co-operatives, which has a number of land settlements under its jurisdiction, may seek the services of the Ministry of Economic Affairs in providing markets for sales of produce from the settlements, and may also request co-operation from the Department of Agriculture an advice concerning proper cultivation techniques.

4) Similarly, the Agricultural Credit Co-operatives, which are established for the purpose of rendering farm credit may seek help in the same manner as the Public Welfare Department from the Ministry of Economic Affairs. Technical assistance may be given to the co-operatives by the Department of Agriculture.

5) Another important factor which will contribute to successful operation of the organization and affiliates is the cheap transport costs. The Government is required to give them prior access

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to freight space on the condition that the special privilege thus afforded shall not be abused.

6) To provide loans on an installment basis to various small retailers. This is to encourage the Thai people to enter into business more and more.

To improve the nation's rice export, the following shall be undertaken:-

1) The minimum rice reserve for export will be 120,000 tons compared with the present small stock of 70,000 - 80,000 tons in Bangkok and Thonburi area. Adequate stock of rice for export will enable the exporters to meet the export orders in time, and, also, minimizes the fluctuation of price. However, the task of building sufficient reserve stocks to meet export demand as specified above will be left in private hands.

2) To achieve more effective quality control, the rice to be exported will be milled in Bangkok and Thonburi where paddy can also be better stored according to grade classifications. Furthermore, new rice mills will not be permitted in areas where existing mills are already too many.

3) Most of existing rice mills are inefficient capable of producing only 65% milled rice. This ratio could be raised if the rice mills were to replace their out-moded milling machines with modern sets.

4) To uphold the traditional reputation of Thai rice in the world market, the Ministry of Economic Affairs will take strict measures to insure the quality of the rice exported.

VIII Public Health.

In the area of public health, the four major principles are to be strictly observed, namely:-

1) To improve the health of the Thai people by extending health services in both central and provincial areas. These include eradication as well as prevention of epidemic and other communicable diseases.

2) To provide medical services to the sick by establishing hospitals

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in various densely populated area.

3) To make possible the attainment of the two objectives mentioned above, it is necessary that doctors, nurses and other health officers, by thoroughly trained in sufficient numbers to meet the need of the country.

4) To install the system of analysis and supervision for food and medicine, together with medical research, and scientific diagnosis for various diseases.

In implementing this public health program, aimed at accomplishing the four main objectives described above, the Ministry of Health is required to co-ordinate in good harmony various basic projects in the manner hereunder recommended:-

Sanitation.

In the field of sanitation, the Ministry of Health undertakes to launch a comprehensive improvement and extension of provincial health centers, leading towards a complete conversion of second-class centers in every provincial district into first-class ones. These first-class centers' staff are to consist of, a doctor, a nurse, a midwife and a sanitation officer, and to have ten emergency beds. The currently existing first-class centers are reported to constitute only one-third of the total number of 498 districts. Accordingly, efforts will be made to convert the second-class centers into first-class at the rate of 5 per year. But in the light of the present limited resources, such conversion is cut down to the rate of 2 centers per year throughout the first three years of the Six-year Plan. Starting from B.E. 2504, the districts selected to undergo such conversion are: Bang-Sapan (Prachuabkirikant) and Kraburi (Ranong). In B.E. 2505, the centers at Ban-na (Nakornnaiyok), and Huay-yod (Trang) are to follow suit, and in B.E. 2506, the centers at Ban Tak (Tak), and Manorom (Chainat) are to have their turn respectively.

In starting the conversion project, prior consideration shall be placed upon particular districts which are densely populated. Those districts which are moderately inhabited, but are somewhat isolated shall occupy a second place on the priority list. To avoid duplication, health centers will not be established in the border districts and others where there are already hospitals

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set up by the Department of Medical Service.

In the area of communicable diseases eradication and prevention, there shall be a vigorous campaign throughout the next six years, to have malaria under complete control. Tuberculosis, leprosy, yaws and other communicable diseases will be dealt with in close co-operation with WHO and ICA.

Moreover, at the same time, the Department of Health shall undertake to co-ordinate the work of its Rural Health Program, with the Ministry of Interior's Community Development project, which is to be extended to cover most provinces within the next six years.

Medical Services.

At the present time, there is at least a hospital in every province. Those which have district hospitals are: Saraburi - Pra Buddha Baht District Hospital; Singhaburi - Indhaburi Hospital; Nakornpanom - Mukdahan Hospital; Chiengrai - Payao Hospital; Tak - Mae Sod Hospital; Sukotai - Srisengworn Hospital; Rajaburi - Banpong and Bhotaram Hospitals; Songkla - Hadyai Hospital. According to the Six-Year Plan, there will be a construction of two new regional hospitals, namely, Ubolrajadhani and Songkla Hospitals, in addition to the two existing ones - Chinaraj and Nakornrajasima Hospitals. Similar consideration is to be given to the erection of 6 new district hospitals as follows: Chieng - kam (Chiengrai); Dammernsadoag (Rajaburi); Yasothorn (Ubolrajadhani); Sungaiko-lok (Naradhiwas); Mae-Sareang (Mae Hong Sorn) and Takaopa (Panga). As required by the Six-Year Plan, the medical services project shall include the improvement of all provincial hospital, by adding more beds, buildings, doctor staff, and others.

There will be a moderate extension of services in Bangkok area during the next 6 years. The extension works include:-

1) Women Hospital : A new building and 450 beds for the Department of Obstetrics and 100 beds for other departments.
2) Priest's Hospital : 200 beds.
3) Lert Sin Hospital : buildings to accommodate additional 300 beds.
4) Mental Hospital : buildings to accommodate additional 400 beds.

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For the provinces, there will be additional 250 beds for the Mental Hospitals and 1,700 beds for other provincial hospitals.

In conclusion, by the end of the six-year period, hospitals under the control of the Department of Medical Services will have additional 3,500 beds. Together with other Government and private hospitals, additional facilities for internal patients will consists of not less than 4,500 beds at the end of the plan period, an increase of 1/3 of the existing number of beds.

Besides the increased accommodation of internal patients and the completion of the present project of adding surgical and x-ray facilities to existing provincial hospitals, more residential quarters will be built for the staff.

The main problem of public health development is the shortage of staff. A great increase in medical and health services is much needed in Thailand. However, at present, there are only 3,172 first class doctors, the equivalent of 1 doctor per [illegible],500 of population (the average for Asia is 1 doctor for 6,000 inhabitants). Of the total number of doctors now available, about 2,300 practice in Bangkok and Thonburi where the ratio of doctor to the population is 1: 800. There are relatively few doctors practicing in the provincial area, the ratio being only 1 : 32,000. It can, therefore be concluded that to attain the ratio of 1 : 6,000 in Thailand, about 1,700 - 1,800 doctors must be produced within the next six years. Considering the available resources it is planned to produce 1,500 doctors within the time required.

Another shortcoming is the lack of nurses and midwives. At present, the schools of nursing are producing about 400 nurses each year. The number of the graduates of all nursing schools totals approximately 6,000. However, of this total only about 5,000 are still practising; thus the present ratio of nurses to the population being 1 per 4,900. Furthermore, only 1/3 of the practicing nurses are in the provincial area.

According to the six year plan, the Ministry of Public Health plans to produce additional 2,700 nurses and about 3,000 second-class midwife and

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assistant nurses. Out of this total, 1,200 nurses and all second-class midwife and assistant nurses will be posted in provincial hospitals and health centres. As a result, it is expected that by 2509 the ratio of nurses to population will be raised to 1 : 3,520.

The number of nurses in both Bangkok and provincial hospitals and health centers is very small. Efforts will be made to raise the ratio of doctor to nurse in the hospitals from the present 1 : 2 to 1 : 4.

Research in Medical Science.

The Department of Medical Science has been responsible for procuring medical supplies for the Government's hospital and health centers. In addition, it has engaged in supervisory and analysis works on food and drugs, diagnostic laboratory works, the production of household medical supplies for sale to the public, and, research in indigenous medical plants and materials.

The problem confronting the Department at present is the lack of adequate research facilities and of equipment and machinery necessary for the production of sufficient medical supplies to meet the demand of the hospitals and health centers throughout the country. The shortage of staff at the distribution center causes undue delay in the delivery of medical supplies to their destination.

During the plan period, the Department will concentrate on increasing the efficiency of its present operations rather than on expanding its activities. For instance, it will acquire additional staff for the distribution center so that the demand of provincial hospitals and health centers for medical supplies can be met without delay.

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